

Staff Summary
Method 2B Pathway Application
Methes Energies Canada Inc., Ontario, Canada
Corn Oil Biodiesel (BIOD017)

Deemed Complete Date: March 25, 2014
Posted for Comment: April 14, 2014
Certified and Posted: April 24, 2014

Pathway Summary

Methes Energies Canada Inc. produces biodiesel from used cooking oil and corn oil in a biodiesel plant in Sombra, Ontario, Canada. The company has applied for a Low Carbon Fuel Standard (LCFS) Method 2B pathway for the fuel produced in this plant. The plant uses a standard fatty acid methyl ester (FAME) transesterification process to produce biodiesel and has a production capacity of 13.5 million gallons per year. In March of 2014, the corn oil biodiesel pathway was assigned a LCFS identification code of BIOD017 and certified with a carbon intensity (CI) of 9.78 gCO₂e/MJ.

During the certification process, staff identified a calculation error in the feedstock transportation CI. The applicant calculated the feedstock transportation CI using the biodiesel module in CA-GREET. The applicant has confirmed the error and has recalculated the pathway CI using the correct methodology. The recalculated corn oil biodiesel pathway CI is 16.62 gCO₂e/MJ.

Methes agrees to make the certified pathway CI available via the LCFS Method 1 Lookup Table to other biodiesel producers whose production pathway is accurately described by the approved pathway developed in the Methes application.

Carbon Intensity of Biodiesel Produced

The LCFS lookup table currently contains no pathway for biodiesel produced from used cooking oil and corn oil in Canada. Therefore, the Methes pathway falls under the Method 2B provisions of the LCFS. Because the Methes application was submitted under the Method 2B process, it is not subject to the substantiality requirements with which Method 2A applications must comply (a minimum improvement of five gCO₂e/MJ, and a minimum production volume of ten million gallons per year). The proposed fuel pathway carbon intensities are shown in the following table.

Proposed Lookup Table Entries

Fuel	Pathway Identifier	Pathway Description	Carbon Intensity in gCO ₂ e/MJ		
			Direct Emissions	Land Use or other Indirect Effects	Total
Biodiesel	BIOD017	2B Application*: Midwest Corn Oil; Biodiesel produced in Canada	16.62	0	16.62

*Specific Conditions Apply

Operating Condition

In using the corn oil BD pathways described in this Staff Summary, Methes must meet the following operating conditions for every gallon of biodiesel sold in California: Every volume of BD that Methes sells into the California market must be labeled to identify the feedstock used to produce that volume. In labeling its volumes, Methes shall follow the procedures described in the “Mixed-Feedstock Bio- and Renewable Diesel Guidance” available on the Low Carbon Fuel Standard web site (<http://www.arb.ca.gov/fuels/lcfs/2a2b/internal/mixed-feedstock-bdrd-120112.pdf>).

Staff Analysis and Recommendation

Staff has reviewed the Methes application and finds the following:

- Staff replicated, using the CA-GREET spreadsheet, the carbon intensity values calculated by the applicant; and
- Staff has confirmed the transport distance and marginal electricity mix values used by Methes in its pathway report.

On the basis of these findings, staff recommends that Methes’ application for a Method 2B pathway be certified.